REMARKS

Claims 2, 3, 20-24, 38, 42, 44-46 and 48-52 presently appear in this case. No claims have been allowed, although claim 3 has been indicated to be allowable if rewritten into independent form. The Official Action of May 22, 2009, has now been carefully studied. Reconsideration and allowance are hereby respectfully urged.

Briefly, the present invention relates to am isolated protein capable of binding to tumor necrosis factor receptor-associated 2 protein (TRAF2), which is either a polypeptide of SEQ ID NO:3 or variant thereof that has no more than 10 amino acid changes from the amino acid sequence of SEQ ID NO:3 and retains its capability of binding to TRAF2. The invention further relates to compositions comprising such protein and molecules having the antigen-binding portion of an antibody capable of binding to such protein.

Claims 2, 20-24, 38, 42 and 48-50 remain rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. The examiner states that the subject matter of the claims is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the claimed invention. The examiner relies on example 11A of the written description training materials and states that in the present application, there was only one protein disclosed having the amino acid

sequence of SEQ ID NO: 3 and having the activity of binding TRAF2 and that there was no identification of a binding domain or domains and there was no other protein disclosed in the art that had the same activity and accordingly one of skill in the art would not accept the disclosure of SEQ ID NO: 3 as representative of other proteins varying by 5 or 10 amino acids, even conservative amino acids substitutions, having the activity of binding TRAF2. This rejection is respectfully traversed.

First of all, new claims 51 and 52 have now been added which do not recite any function. Thus, these claims are allowable for the same reasons as required by the written description training materials example 10, claim 2, as well as example 11A, claim 1.

Furthermore, the rejection should be withdrawn for the reasons explained in Example 11B, claim 2, in view of the fact that in the present case there is an art recognized structure-function correlation. Submitted herewith is Ye et al. "The structural basis for the recognition of diverse receptor sequences by TRAF2" *Molecular Cell* 4:321-330 (1999). The examiner has already ruled that for the claims of the present application that require SEQ ID NO:3, the effective filing date is February 17, 2000 (the filing date of Israeli priority application 134,604). Thus, the publication date of the Ye reference is prior to the present effective filing date and represents the state of the art as of the effective filing date of all of the claims subject to the present rejection.

It can be seen from the summary section on the first page of Ye et al. that TRAF2 binding consensus sequences were known. Note particularly where it states:

> A major TRAF2-binding consensus sequence, (P/S/A/T)x(Q/E)E, and minor consensus motif, PxQxxD, can be defined from the structural analysis, which encompass all known TRAF2-binding sequences.

In view of this art-known structure-function relationship, one of ordinary skill in the art would have readily seen that residues 136-139 of SEQ ID NO:3 are SGEE, resides 446-449 are PVQE, and residue 669-672 are TSEE, all of which fall within the TRAF2 binding motif. In view of this known structure-function relationship, one of ordinary skill in the art would be well aware that the inventor was in possession of not only SEQ ID NO: 3, but variations of up to 10 amino acid residues that do not effect the binding to TRAF2, which would mean that the changes could be expected to be made everywhere other than within these binding motifs.

In summary, the present claims are supported with an adequate written description in view of the small number of changes in a large protein, for the reasons previously argued in this case. Furthermore, the claims are additionally free of this ground of rejection in light of the new evidence presented herewith that the art was aware of a structure-function relationship in TRAF2 binding proteins, establishing that the present inventor was in possession of operable modifications in light of this structure-function relationship that was art recognized prior to the effective filing date of

the present invention. For all of these reasons, reconsideration and withdrawal of this rejection are respectfully urged.

Claims 21-24 and 44-46 have been rejected under 35 U.S.C 102(e) as being anticipated by Lal et al. The examiner states that the Lal publication has an effective date under 35 U.S.C 102(e) of April 27, 1999. The examiner states that Lal discloses a protein that is identical to amino acids 221-949 of SEQ ID NO:3 of the present application, except for one amino acid mismatch at amino acid 38 and two amino acid insertions between amino acids 281 and 282 and between amino acids 343 and 344. The examiner states that Lal teaches antibodies and monoclonal antibodies to the protein and that the vast majority of the antibodies of Lal would bind to SEQ ID NO:3 of the present invention and therefore the claim is anticipated. This rejection is respectfully traversed.

Respectfully, the examiner has erred in stating that the 35 U.S.C 102(e) date of the Lal publication is April 27, 1999. This cannot be the case, however, because the international application (IA) was filed prior to November 29, 2000. Thus, the flowcharts for 35 USC 102(e) dates in MPEP §706.02(f)(1) establish that the 102(e) date cannot be prior to the filing date of the divisional application that was published as the Lal publication, i.e., August 19, 2004. The flowchart clearly indicates that when an IA is in the continuity chain for which benefit is sought (when the reference being relied on is a US application publication), if

the IA was filed prior to Nov. 29, 2000, the §102(e) date "is the filing date of the U.S. application that claimed benefit to the IA" (referring to Form Paragraph 7.12). Thus, the earliest 102(e) date for the Lal publication is August 19, 2004.

In the examiner's discussion of priority to which the present claims are entitled, the examiner acknowledges that foreign priority document IL134604 discloses SEQ ID NO:3 in its entirety and this priority claim has been perfected. Thus, all of the present claims are entitled to a priority date at least as early as the filing date of IL134604. This date is February 17, 2000. As this date is well prior to August 19, 2004, the Lal publication is not available as a reference. Reconsideration and withdrawal of this rejection are therefore respectfully urged.

It is noted that the PCT publication corresponding to the U.S. Lal publication is WO2000/17355, which was published on March 30, 2000, and is available as a reference under 35 U.S.C 102(b) as of that date. However, as applicant's effective filing date for all of the present claims is at least as early as February 17, 2000, this publication is also unavailable as a reference. Thus, the disclosure of Lal is not available as a reference under any portion of 35 USC 102. A copy of the Lal PCT publication is submitted herewith in an IDS.

It is submitted that all of the claims now present in the case clearly define over the references of record and

fully comply with 35 U.S.C. 112. Reconsideration and allowance are therefore earnestly solicited.

Respectfully submitted,

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